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17 UNITED STATES DISTRICT COURT

18 NORTHERN DISTRICT OF CALIFORNIA

19  
20 IN RE TESLA, INC. SECURITIES  
21 LITIGATION

Case No. 3:18-cv-04865-EMC

22 **DEFENDANTS' EMERGENCY MOTION**  
23 **TO COMPEL SUPPLEMENTAL EXPERT**  
24 **REPORTS AND DEPOSITIONS**

25 **ORAL ARGUMENT REQUESTED**

26 Date: TBD

27 Time: TBD

Location: Courtroom 5, 17th Floor

Judge: Hon. Edward Chen

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**NOTICE OF MOTION AND MOTION**

PLEASE TAKE NOTICE that, as soon as possible, on a date to be decided by the Court, in Courtroom 5 – 17th Floor of the United States Court for the Northern District of California, located at 450 Golden Gate Avenue, San Francisco, CA 94102, the Honorable Edward M. Chen presiding, Defendants, through their counsel, will move, and hereby do move pursuant to Federal Rules of Civil Procedure 26, 30, and 37 to compel supplemental expert reports from Plaintiff's expert witnesses Professor Steven Heston and Dr. Michael Hartzmark and to compel further depositions of Heston and Hartzmark to allow Defendants to question the witnesses about their supplemental opinions. Given the January 17, 2023 trial date, and consistent with the Court's Civil Standing Order, Defendants respectfully request an expedited hearing on this motion.

This motion is based on the Memorandum of Points and Authorities below, the Declaration of Kyle Batter and the exhibits attached thereto, the arguments of counsel, and any other matters properly before this Court. Pursuant to Paragraph 11 of the Court's Civil Standing Order, Defendants also submit a proposed order.

DATED: December 21, 2022

Respectfully submitted,

QUINN EMANUEL URQUHART & SULLIVAN, LLP

By: /s/ Alex Spiro

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James Murdoch, Kimbal Musk, and Linda Johnson Rice*

**MEMORANDUM OF POINTS AND AUTHORITIES**

**INTRODUCTION**

It has been more than *eight weeks* since the Final Pretrial Conference, where, in response to the Court’s questions, Plaintiff announced that Professor Heston could revise his expert report to use actual option prices to compare to “but-for” options prices. It has been more than *two weeks* since the Court’s resulting Order. We are now well under a month from trial. Yet, despite repeated requests and meet and confers, Plaintiff has not provided anything: no new disclosures, no new calculations, no supplemental reports. Instead, Plaintiff has taken the opportunity to make *further* material changes to his approach to options damages on the eve of trial, while refusing to provide the discovery necessary for Defendants to respond to these changes. Specifically, Plaintiff refuses to provide the required supplemental expert disclosures to explain his changed approach, refuses to make Professor Heston and Dr. Hartzmark available for supplemental depositions on the changed approach, and refuses to give Defendants time to challenge Plaintiff’s new approach. Defendants urgently request Court intervention to prevent the extreme prejudice caused by Plaintiff’s eleventh-hour gamesmanship.

Heston’s expert report purports to calculate the difference between “actual” options prices and “but-for” options prices. However, as demonstrated in Defendants’ motion in *limine* to exclude Heston’s and Hartzmark’s opinions, Heston did not use “actual” options prices. Instead, he calculated *so-called* “actual” options price by generating theoretical options prices derived from a “straddle.” Hartzmark’s calculation of options damages relies on Heston’s methodology. In ruling on Defendants’ motion in *limine*, the Court found that “Professor Heston’s decision to use theoretical prices derived from straddles rather than the actual market price for each Tesla stock option appears to be unprecedented, and poses serious *Daubert* issues.” (ECF No. 508 at 36:26-28.) The Court, however, did not rule on that portion of Defendants’ motion because, “during the [October 25, 2022] pretrial conference Plaintiff agreed to rerun the stock option calculations using actual option price data instead of the theoretical prices.” (*Id.* at 36:28-37:2.)

Since the October 25 Final Pretrial Conference, Plaintiff has failed to abide by his agreement to simply “rerun the calculations,” and instead, has substantively changed Heston’s and Hartzmark’s opinions in ways not contemplated or sanctioned by the Court (not to mention, long after the expert

1 disclosure deadline to do so). And despite repeated requests, Plaintiff has refused to provide the  
2 supplemental disclosures required by Federal Rule 26 detailing Plaintiff's changed approach, and has  
3 refused to make Heston and Hartzmark available for supplemental depositions on the new approach.  
4 Defendants' motion for this relief should be granted.

5 *First*, while Plaintiff agreed on October 25 to use actual stock option prices to compare to but-  
6 for prices for Tesla options, Plaintiff has failed to provide Defendants with any updated disclosures or  
7 calculations. Plaintiff should be ordered to do so immediately.

8 *Second*, and far more troubling, although the Court condoned an alteration to Heston's  
9 calculation of *actual* options prices, Plaintiff has taken the opportunity to materially alter the method  
10 Heston and Hartzmark use to calculate *but-for* options prices as well. Specifically, Heston and  
11 Hartzmark previously calculated but-for option prices by using but-for stock prices *and but-for*  
12 *implied volatilities*. This was consistent with Plaintiff's theory of the case that Mr. Musk's alleged  
13 material misstatements impacted *both* Tesla's stock price and implied volatilities. However, Plaintiff  
14 has now reversed course—without explanation or justification—and now seeks to discard his use of  
15 *but-for* implied volatilities and replace them with *actual* implied volatilities, as if they could be  
16 interchanged. In other words, Plaintiff now assumes without support that implied volatilities—a key  
17 factor in determining options prices—would have remained exactly the same in the but-for world.  
18 This is despite Plaintiff's *own claim* that *actual* volatilities declined due to Mr. Musk's alleged  
19 misrepresentations, such that but-for implied volatilities and actual implied volatilities were *not* the  
20 same. Plaintiff's decision to alter his methodology and conclusions regarding but-for implied option  
21 volatility is a material shift in Plaintiff's expert opinions necessitating supplemental disclosures.

22 To be clear, Plaintiff has not served any amended reports from Heston or Hartzmark to  
23 articulate this change in approach to calculating options damages. All Plaintiff has done is explain  
24 orally and by email in informal meet and confers that he is substantively changing his approach to  
25 calculating but-for options prices, despite the Court's ruling that Plaintiff's *prior* method for  
26 calculating but-for options prices passed muster under *Daubert*. (ECF No. 508 at 36:17-19.)  
27 Plaintiff's decision to change his approach to calculating options damages on the eve of trial—over  
28 one year after the deadline for expert disclosures—without sufficient information for Defendants to

1 respond violates Federal Rule 26. This should not be done on the fly, with hundreds of millions of  
2 dollars at stake.

3 Plaintiff should be ordered to provide supplemental reports that explain Heston's and  
4 Hartzmark's new approach, including their bases for assuming volatility in the actual and but-for  
5 worlds *are the same*, and Defendants should be given a fair opportunity to depose the witnesses about  
6 these changes in their opinions.<sup>1</sup> Given the approaching trial date, and consistent with the Court's  
7 Civil Standing Order, Defendants respectfully request an expedited hearing on this motion.

### 8 **STATEMENT OF FACTS**

#### 9 **A. Plaintiff's Expert Reports Rely on Theoretical (Not Actual) Stock Option Prices** 10 **to Calculate "Actual" Options Prices and Rely on "But-For" (Not Actual)** 11 **Implied Volatility to Calculate "But-For" Options Prices**

12 To calculate options damages in this action, Plaintiff served the expert reports of Professor  
13 Steven Heston and Dr. Michael Hartzmark. (Declaration of Kyle Batter filed herewith, Exs. A, B.)  
14 Plaintiff engaged Heston to "analyze the price movements of options on Tesla common stock during  
15 the Class Period." (*Id.*, Ex. A ¶ 10.) In his report, Heston proposed calculating both "actual" options  
16 prices and "but-for" options prices.

17 To calculate "actual" options prices, however, Heston created a synthetic Tesla instrument,  
18 known as an at-the-money ("ATM") forward straddle that was not actually traded in the market.  
19 Heston utilized the implied volatility from this synthetic instrument to derive a "re-valued fitted option  
20 value" for the 2,400 Tesla options traded during the class period. (*Id.* ¶ 165 a-b.) To calculate but-for  
21 option prices for each Tesla option, Heston proposed that a "counterfactual implied volatility and  
22 stock price" could be plugged into the Black-Scholes formula. (*Id.* ¶ 183.) Heston contends that the  
23 difference between the "re-valued fitted option value" (i.e., the *purported* "actual" price) and the "but-  
24 for option price" is the price impact of Mr. Musk's tweet. (*Id.* ¶ 165 c-d.)

25 Relying on Heston's calculation of "re-valued fitted option values" and Heston's method for  
26 calculating but-for option values, Hartzmark purported to calculate the damages to Tesla options

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27 <sup>1</sup> Defendants are also entitled to the opportunity to rebut Plaintiff's newfound theory and reserve  
28 their right to seek to exclude the supplemental opinions of Heston and Hartzmark under *Daubert*.

1 purchasers and sellers allegedly caused by Mr. Musk’s tweets. Hartzmark opined that the damages to  
 2 Tesla options purchases and sellers was the difference between Heston’s “re-valued fitted option  
 3 values” (again, purportedly some form of an “actual” option price) and “but-for” option prices—i.e.,  
 4 option inflation or deflation. As Heston had proposed, Hartzmark calculated the but-for option prices  
 5 by plugging but-for stock prices and but-for implied volatilities into the Black-Scholes-Merton  
 6 formula. (*Id.*, Ex. A ¶ 183; *id.*, Ex. B ¶ 215.)

7 **B. Heston and Hartzmark Acknowledge That “But-For” and Actual Volatility Are**  
 8 **Different, and Opine That Musk’s Tweets Impacted Implied Volatility**

9 Including implied volatilities as an input for the calculation of but-for options prices was no  
 10 accident. Hartzmark opined that Mr. Musk’s August 7, 2018 tweets caused the implied volatility of  
 11 Tesla stock options *to significantly decline* during the class period, and Heston suggested a  
 12 correlation. For example, Heston opined: (a) “Following 12:48 p.m. on August 7, 2018, Tesla stock  
 13 prices rose, and long-term ATM-forward Tesla option straddle prices fell sharply. Section 5.4 shows  
 14 that on August 7, 2018, following 12:48 p.m., long-term ATM-forward Tesla option straddles lost  
 15 value. This decline in price is substantial and rare. *This decline can be directly translated into a*  
 16 *significant decrease in implied volatility using standard Black-Scholes-Merton formulas.*” (Batter  
 17 Decl., Ex. A ¶ 12 (emphasis added).) (b) “All long-term Tesla put options lost value on August 7,  
 18 2018. Option theory predicts that rising stock prices and *declining volatility* will reduce the value of  
 19 put options.” (*id.* ¶ 13 (emphasis added).) (c) “Prices of long-term out-of-the money Tesla call options  
 20 fell, while prices of long-term in-the-money Tesla call options rose on August 7, 2018. Call options  
 21 benefitted from the rise in Tesla stock price but were negatively impacted by the fall in implied  
 22 volatility. Consequently, the price of in-the-money and out-of-the-money Tesla call options diverged  
 23 on August 7, 2018. *These two countervailing effects during the Class Period must be netted to*  
 24 *determine the combined impact on option prices.*” (*Id.* ¶ 14 (emphasis added).)

25 Similarly, Hartzmark opined that Mr. Musk’s August 7, 2018 tweets caused the implied  
 26 volatilities of Tesla stock options *to decline*:

27 (a) “[T]here were large and unusual movements in options prices (and  
 28 related implied volatility) following the Musk Tweets. My loss  
 causation analysis has demonstrated these movements were caused by



1 the Musk Tweets and reflected an increased probability of a going  
2 private deal being completed.” (*Id.*, Ex. B ¶ 186.)

3 (b) “Academic research supports this conclusion about option prices  
4 and implied volatility movements in response to announcements of  
5 potential corporate events, such as a going private transaction.” (*Id.* ¶  
6 187.)

7 (c) “Professor Heston demonstrates that for longer-term options *the*  
8 *volatility over the Class Period immediately declines* and then rises by  
9 August 17, 2018.” (*Id.* ¶ 190.)

10 Thus, according to both Heston and Hartzmark, any appropriate calculation of but-for options  
11 prices must take into account changes in implied volatilities purportedly caused by Mr. Musk’s  
12 August 7, 2018 tweets.

13 C. **The Court Ruled That Heston’s Reliance on Theoretical Option Prices to**  
14 **Calculate “Actual” Option Prices Was Improper, But His Calculation of “But-**  
15 **For” Option Prices Was Proper**

16 On September 20, 2022, Defendants filed a motion *in limine* to exclude the opinions of Heston  
17 and Hartzmark. (ECF No. 479.) Among other bases, Defendants argued that Heston’s proposed  
18 model was unreliable because it did not compare *actual* Tesla option prices to but-for prices. (*Id.* at 2-  
19 5.) Instead, it compared one set of *theoretical* prices generated by Heston (inaccurately labeled as  
20 “actual”) to another set of *theoretical* prices proposed by Heston (labeled as “but-for”). (*Id.*) Notably,  
21 Defendants never argued or even suggested that Heston or Hartzmark should use actual *implied*  
22 *volatilities* to calculate but-for option prices.

23 During the October 25, 2022 oral argument on Defendants’ motion, the Court questioned  
24 Plaintiff’s counsel, “why not use the actual option prices” in Heston’s expert opinion, rather than  
25 theoretical prices that only purported to reflect actual prices. (Batter Decl., Ex. C at 36:19-21.) In  
26 response, Plaintiff’s counsel proposed using actual prices. (*Id.* at 53:16-18.) The Court ruled on  
27 Defendants’ motion on December 7, 2022, as part of its Final Pretrial Order. (ECF No. 508.) The  
28 Court found that, on the one hand, Heston’s “use of the BSM model to derive implied volatility [i.e.,  
*but-for* volatility—not *actual* volatility] and calculate counterfactual prices is sufficiently reliable for  
*Daubert*.” (ECF No. 508 at 44:21-22.) On the other hand, the Court agreed with Defendants that  
Heston could not use theoretical option prices, rather than actual market prices, to compare to the but-

1 for option prices:

2 [T]he Court finds that Professor Heston’s use of the Black-Scholes-  
 3 Merton model to calculate the counterfactual but-for price of stock  
 4 options is sufficiently reliable to pass muster under *Daubert*. The  
 5 process of calculating but-for prices inevitably requires some degree of  
 6 theoretical modeling, and the Black-Scholes-Merton model appears  
 7 sufficiently scientifically valid and widely accepted. ***But Professor***  
 8 ***Heston’s use of artificial data to calculate the “re-valued fitted option***  
 9 ***value” (i.e. the “actual” price) is another matter. There are***  
 10 ***substantial questions regarding Professor Heston’s use of adjusted***  
 11 ***prices rather than the actual observed trading data for each***  
 12 ***individual stock option. Unlike with counterfactual prices, which***  
 13 ***must be modeled, the actual prices for Tesla’s stock options are***  
 14 ***observable from actual market data.*** Professor Heston’s decision to  
 15 use theoretical prices derived from straddles rather than the actual  
 16 market price for each Tesla stock option appears to be unprecedented,  
 17 and poses serious *Daubert* issues. ***But the Court ultimately does not***  
 18 ***rule on this issue because, in light of these concerns, during the***  
 19 ***pretrial conference Plaintiff agreed to rerun the stock option***  
 20 ***calculations using actual option price data instead of the theoretical***  
 21 ***prices.***

22 (*Id.* at 36:17-37:2 (emphasis added). Notably, the Court also observed: “While the Court recognizes  
 23 that implied volatility is different from stock price, they are related, and *neither party described any*  
 24 *evidence nor articulated any reason to believe that the observed movements in implied volatility were*  
 25 *due to something other than the Musk Tweets.*” (*Id.* at 48:13-16 (emphasis added).)

26 **D. Plaintiff’s Experts Have Made Material Changes in Their Approach to**  
 27 **Calculating Options Damages, But Have Not Provided the Required Disclosures**

28 On December 11, 2022, just a few days after the Court issued its Final Pretrial Conference  
 Order, Defendants reached out to remind Plaintiff that, as noted in the Court’s Order, Plaintiff had  
 “agreed” ***nearly two months ago*** “to use actual, not adjusted data to calculate the ‘actual’ (not but-for)  
 curve” and to “rerun his calculations using actual market data for each particular stock option.”  
 (Batter Decl., Ex. D at 5.) Defendants requested supplemental disclosures from Heston and  
 Hartzmark consistent with the Court’s Order, and their supplemental depositions. (*Id.*)

Rather than provide updated “actual” calculations—as had been proposed at the Final Pretrial  
 Conference months before—Plaintiff responded the following day informing Defendants ***for the first***  
***time, and months after the expert disclosure deadline,*** that, in addition to using actual options prices

1 to calculate the actual options curve, Plaintiff would “just use *actual* reported *implied volatility* for all  
 2 calculations of option damages,” including the but-for options prices. (*Id.* at 4 (emphasis added).)  
 3 Notably, although this Court ruled that Plaintiff could “rerun the stock option calculations using actual  
 4 option price data instead of the theoretical prices” for purposes of calculating the “actual” option  
 5 prices (ECF No. 508 at 36:21-37:2), the Court did not grant any such request with respect to but-for  
 6 calculations, which the Court found “inevitably requires some degree of theoretical modeling.” (*Id.* at  
 7 36:17-21.) Despite making a substantive change with respect to the calculation of but-for options  
 8 prices—and in turn options damages—Plaintiff declined to provide supplemental expert disclosures  
 9 and ignored Defendants’ request for depositions. (Batter Decl., Ex. D at 4.)

10 Following this surprising disclosure, Defendants sought to meet and confer with Plaintiff to  
 11 understand Plaintiff’s new approach, which was arranged for Friday, December 16. (*Id.* 2-4.) During  
 12 the call, Defendants requested supplemental expert reports that explained Plaintiff’s new approach to  
 13 calculating damages on Tesla options, the bases for the new approach, and all supporting calculations.  
 14 (*Id.* at 2.) Defendants explained that they were entitled to the supplemental disclosures, as well as to  
 15 depose Heston and Hartzmark about the inconsistencies between their newly disclosed approach—  
 16 which for the first time is now premised on the assumption that implied volatility *did not change as a*  
 17 *result of Mr. Musk’s tweets*—and their prior opinions. (*Id.*) Plaintiff did not agree to Defendants’  
 18 requests. (*Id.* at 1.)

19 **E. Plaintiff’s Experts’ New Approach to Calculating “But-For” Options Prices Is**  
 20 **Inconsistent With Their Prior Opinions**

21 With just a month to trial, Plaintiff has proposed a new and very different methodology for  
 22 calculating but-for option prices—a methodology that is completely at odds with Hartzmark’s and  
 23 Heston’s prior opinions and Plaintiff’s arguments to this Court. Here is the best description of it  
 24 Plaintiff has provided to date:

25 Consistent with this ruling [on Defendants’ motion in *limine*], Plaintiff  
 26 proposes that damages for investors in Tesla stock options be  
 27 calculated using the out-of-pocket methodology using the Black-  
 28 Scholes-Merton model to calculate the but-for price for Tesla stock  
 options and this but-for price should be calculated using the but-for  
 price of Tesla stock as determined by the jury at trial *and the actual*

1                    *observed implied volatility as reported by the CBOE Exchange on the*  
 2                    *date the option was transacted during the Class Period.*

3                    Plaintiff's proposal will eliminate the requirement for the jury to  
 4                    determine but-for implied volatilities for Tesla options as reflected in  
 5                    Plaintiff's initial proposed verdict form. This question has now been  
 6                    removed from the revised verdict form.

7 (ECF No. 513 at 3:7-12, 5:1-3 (emphasis added).) In other words, both Heston and Hartzmark, having  
 8 opined and Plaintiff having argued to this Court that Mr. Musk's August 7, 2018 tweets caused the  
 9 level of implied volatilities to *decline*, now propose to entirely *ignore this* when calculating damages  
 10 to Tesla option holders. Specifically, when calculating the but-for price of Tesla options during the  
 11 Class Period, Hartzmark now intends to use "actual" implied volatilities reported by the CBOE. He  
 12 intends to assume that Mr. Musk's tweets had *no effect* on the implied volatilities of Tesla options  
 13 during the Class Period, even though both he and Heston opined that Mr. Musk's tweets caused  
 14 implied volatility to decline. This is not only squarely inconsistent with Hartzmark's and Heston's  
 15 prior opinions but also with Hartzmark's *current opinion* that changes in implied volatility can be used  
 16 to measure the "direct effect" of Mr. Musk's tweets. (Ex. B ¶¶ 178, 197, 201.)

### 17                    **LEGAL STANDARD**

18                    Expert reports "must contain," among other things, "(i) a complete statement of all opinions  
 19 the witness will express and the basis and reasons for them; (ii) the facts or data considered by the  
 20 witness in forming them; (iii) any exhibits that will be used to summarize or support them." Fed. R.  
 21 Civ. P. 26(a)(2)(B). A party that produces an expert report, "*must* supplement or correct [that report]  
 22 . . . in a timely manner if the party learns that in some material respect the [report] is incomplete or  
 23 incorrect, and if the additional or corrective information has not otherwise been made known to the  
 24 other parties during the discovery process or in writing." Fed. R. Civ. P. 26(e) (emphasis added).  
 25 "[T]he party's duty to supplement extends both to information included in the report and to  
 26 information given during the expert's deposition." *Id.* "Rule 26(e) creates a duty to supplement."  
 27 *Luke v. Fam. Care & Urgent Med. Clinics*, 323 F. App'x 496, 500 (9th Cir. 2009). "If a party fails to  
 28 make a disclosure required by Rule 26(a), any other party may move to compel disclosure and for  
 appropriate sanctions." Fed. R. Civ. P. 37(a)(3)(A).

**ARGUMENT**

**I. Two Months Ago, Plaintiff Agreed That Heston Would Use Actual (Rather Than Theoretical) Option Prices to Calculate the Actual Options Prices, But Plaintiff Has Not Produced Anything**

During the October 25, 2022 oral argument on Defendants’ motion in *limine*, the Court questioned Plaintiff’s counsel, “why not use the actual option prices” to compare to but-for option prices, rather than theoretical prices. (Batter Decl., Ex. C at 36:19-21.) In response, Plaintiff’s counsel agreed that “if the Court’s concern is [that Heston’s methodology is] not sufficiently supported and would rather-- if the Court’s preference is that we use actual prices, we [will] use actual prices.” (*Id.* at 53:16-18.) The Court confirmed Plaintiff’s agreement in its Final Pretrial Conference Order. (ECF No. 508 at 37:1-2 (“[D]uring the pretrial conference Plaintiff agreed to rerun the stock option calculations using actual option price data instead of the theoretical prices”).)

It has been two months since the hearing and Plaintiff has provided nothing: no new disclosures, no new calculations, no supplemental reports. Plaintiff should be required to do so immediately consistent with Plaintiff’s agreement, the Court’s Order, and Federal Rule 26(e).

**II. Plaintiff’s Eleventh-Hour Change of Expert Opinions Entitles Defendants to Supplemental Expert Reports and Depositions**

It is black letter law that expert witness “trial testimony shall be limited to what was disclosed in the [expert’s] reports.” *Dat Thanh Luong v. Napa State Hosp.*, 2019 WL 4083032, at \*1 (N.D. Cal. Aug. 29, 2019) (citing *U.S. Fidelity & Guar. Co. v. Lee Invs. LLC*, 641 F.3d 1126, 1138 (9th Cir. 2011)); *see also Therasense, Inc. v. Becton, Dickinson & Co.*, 2008 WL 2037732, at \*4 (N.D. Cal. May 12, 2008) (discussing the “paramount rule that all experts will be limited on direct examination to the four corners of their report”); *Langer v. Wasserman*, 2019 WL 7900038, at \*2 (C.D. Cal. Nov. 26, 2019) (expert “testimony is limited to the opinions contained in her report”). Expert witnesses seeking to change their opinions must supplement their disclosures consistent with Federal Rule 26(e). *See, e.g., Oracle Am., Inc. v. Hewlett Packard Enter. Co.*, 2019 WL 468809, at \*2 (N.D. Cal. Feb. 6, 2019) (“A party that fails to timely supplement in compliance with the Rule is not allowed to use that information to supply evidence on a motion, at a hearing, or at a trial, unless the failure was substantially justified or is harmless.”) (quoting Fed. R. Civ. P. 37(c)(1)).

As courts routinely find, supplemental expert reports and depositions are warranted under Federal Rule 26 when experts alter or fail to sufficiently disclose opinions in their initial reports. *See, e.g., Apple, Inc. v. Samsung Elecs. Co.*, 2012 WL 5878392, at \*2 (N.D. Cal. Nov. 21, 2012) (ordering further expert depositions where the experts “offer[ed] new, previously undisclosed opinions that Samsung ha[d] not had an opportunity to test through deposition”) (citations omitted); *Gaffron v. United States*, 2016 WL 3042667, at \*4 (S.D. Cal. Feb. 24, 2016) (ordering the plaintiff to provide a supplemental expert report on a topic not sufficiently disclosed and allowing the defendant to depose the expert on the supplemental report); *Intervention911 v. City of Palm Springs*, 2014 WL 12853209, at \*2 (C.D. Cal. May 30, 2014) (granting motion to compel three supplemental expert reports where the experts “failed to identify the specific facts and data [they] considered in forming [their] opinions”); *Immunex Corp. v. Sanofi*, 2018 WL 1941714, at \*7 (C.D. Cal. Feb. 27, 2018) (ordering a further deposition of the defendant’s expert on “the topics of the [previously] Undisclosed Experiments”).

Here, *after* the Court ruled on the propriety of Heston’s and Hartzmark’s opinions on December 7, 2022 (ECF No. 508), Plaintiff informed Defendants that the experts would be materially changing their opinions with respect to the calculation of but-for option prices, a change that was never discussed and certainly not approved by this Court (unlike the change to “actual” options prices, which was discussed at the pre-trial conference). Specifically, Plaintiff now proposes that to calculate **but-for** options prices, Heston and Hartzmark would “use **actual** reported implied volatility,” rather than the **but-for** implied volatility that Plaintiff’s experts had disclosed in their reports and at their depositions. (Batter Decl., Ex. D at 4.)

In addition to having never been timely disclosed, this new position directly contradicts Plaintiff’s experts’ prior positions. Relying on Heston, Hartzmark’s initial expert opinion was that Mr. Musk’s alleged misrepresentations caused a *decrease* in the implied volatilities of Tesla long-term call options during the Class Period. (*E.g., id.*, Ex. B ¶¶ 186-90.) He opined that this decrease in volatility counteracted an increase in stock prices to *reduce* the value of the options (e.g., if one is betting on the likelihood of a stock hitting a certain price, the less volatile the stock, the less likely it will be to hit the strike price at any given point). (*E.g., id.*) Hartzmark previously opined that, absent



1 Mr. Musk's tweets regarding taking Tesla private, implied volatility would have been *higher* (this is  
 2 because, when a take-private is being considered, volatility is lower as the stock price triangulates  
 3 around the potential deal price). (*E.g., id.*)

4 In stark contrast, Heston and Hartzmark now seek to assume—with no basis and no  
 5 supplemental disclosure explaining the change—that implied volatility would have been *the same* in  
 6 the but-for world as it was in the *actual* world. In other words, they wish to assume that *absent* Mr.  
 7 Musk's alleged misrepresentations, Tesla's volatility *would still have declined for no reason*.

8 Because implied volatility would be lower in the but-for world under Plaintiff's new theory  
 9 than under his experts' prior opinions, but-for options prices would therefore be lower as well, all  
 10 other things being equal. As a result, damages for many class members would be *higher* under  
 11 Plaintiff's new theory, because damages are calculated based on the difference between what a  
 12 plaintiff paid and what they should have paid in the but-for world. Yet Plaintiff has provided no  
 13 explanation or factual support to date for his new approach. Plaintiff's unexplained, eleventh-hour,  
 14 substantive change to his options damages methodology necessitates supplemental disclosures and  
 15 depositions under Fed. R. Civ. P. 26(e).

## 16 CONCLUSION

17 For the foregoing reasons, Defendants respectfully request that the Court (1) compel Professor  
 18 Heston and Dr. Hartzmark to produce supplemental expert disclosures, as required by Federal Rule  
 19 26(e), that explain their new approach to calculating options damages, all bases therefor, and all  
 20 underlying calculations, and (2) compel further depositions of Professor Heston and Dr. Hartzmark to  
 21 allow Defendants to question them about their supplemental opinions. Given the January 17, 2023  
 22 trial date, and consistent with the Court's Civil Standing Order, Defendants respectfully request an  
 23 expedited hearing on this motion.

24  
 25 DATED: December 21, 2022

Respectfully, submitted,

26 QUINN EMANUEL URQUHART & SULLIVAN, LLP

27 By: /s/ Alex Spiro

Alex Spiro (appearing pro hac vice)

**ATTESTATION**

I, Kyle K. Batter, am the ECF user whose ID and password are being used to file the above document. In compliance with the Local Rules, I hereby attest that Alex Spiro has concurred in the filing of the above document.

/s/ Kyle K. Batter

Kyle K. Batter